



BAR CODE MEDICATION ADMINISTRATION (BCMA)

TECHNICAL MANUAL/SECURITY GUIDE

Version 2.0
May 2002

(Revised February 2003)

Revision History

The table below lists changes made since the initial release of this manual. Update an existing manual with the Change Pages document or print out the entire updated manual.

Note: Some pages in the Change Pages document are unchanged, but provided for two-sided copying only. Only changed pages include the patch number and revision date in the page footer.

Date	Revised Pages	Patch Number	Description
02/03	29-32	PSB*2*6	<ul style="list-style-type: none">– Updated the Title Page, the Table of Contents, and this Revision History Page.– Added Appendix A to this guide, which describes how BCMA V. 2.0 processes schedule information from Inpatient Medications V. 5.0.
08/02	Title Page, 6, 7	PSB*2*1	<ul style="list-style-type: none">– Updated the Title Page and included this Revision History Page.– Renumbered the pages with Roman numerals to include the Revision History Page.– Decreased the total number of routines for BCMA V. 2.0 to equal 51.– Changed the “BCMA V. 2.0 Routines Installed on to VISTA Server” example to reflect the deletion of routine PSB0000 from the VISTA Server.
05/02			Original Released GUI User Manual.

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Appendix A: Processing of Schedule Information

How BCMA Processes Schedule Information

This section describes how BCMA V. 2.0 processes Schedule information from Inpatient Medications V. 5.0, and how it determines when to display a Continuous medication order on the VDL. Keep in mind that BCMA displays medication orders on the VDL between the order Start and Stop Date and Time.

The information provided below defines term used in this section:

- **Admin Time:** The ADMIN TIMES field (#41) of the UNIT DOSE multiple (#62) of the PHARMACY PATIENT file (#55), and the ADMINISTRATION TIMES field (#.12) of the IV multiple (#100) of the PHARMACY PATIENT file (#55).
- **Frequency:** The FREQUENCY field (#42) of the UNIT DOSE multiple (#62) of the PHARMACY PATIENT file (#55), and the SCHEDULE INTERVAL field (#.17) of the IV multiple (#100) of the PHARMACY PATIENT file (#55).
- **Schedule:** The SCHEDULE field (#26) of the UNIT DOSE multiple (#62) of the PHARMACY PATIENT file (#55), and the SCHEDULE field (#.09) of the IV multiple (#100) of the PHARMACY PATIENT file (#55).
- **Schedule Type:** The SCHEDULE TYPE field (#7) of the UNIT DOSE multiple (#62) of the PHARMACY PATIENT file (#55). For IV orders, it refers to the pseudo-type determined by Inpatient Medications that is sent to BCMA.

Steps for Processing Schedule Information

This section describes the steps for processing schedule information from Inpatient Medications to BCMA.

- 1 BCMA checks the Inpatient Medications order for a Schedule Type of “Continuous.”
 - If a Schedule Type other than “Continuous” is listed, BCMA quits processing the order, and proceeds to the correct processing method for that order’s Schedule Type.

Appendix A: Processing of Schedule Information

Steps for Processing Schedule Information (cont.)

- 2 BCMA verifies information provided in the Schedule of the Inpatient Medications order.
 - If the Schedule is blank, BCMA quits processing the order and sends a Due List Error Notification message. (**Note:** A blank indicates that no Schedule was specified.)
 - If the Schedule lists a Day of the Week (i.e., MO-WE@1200), BCMA checks the Admin Time(s) for the correct two- or four-digit format (i.e., 12-14, 1200, 1400).
 - If an Admin Time is listed, BCMA displays the order on the VDL, on specified days, using the Admin Time.
 - If no Admin Time is listed, BCMA quits processing the order and sends a Due List Error Notification message.
 - If the Schedule lists an Admin Time (i.e., 12-14, 1200, 1400), BCMA checks the Admin Time in the Inpatient Medications order.
 - If the Admin Time is blank, BCMA quits processing the order and sends a Due List Error Notification message.
 - If an Admin Time is listed, BCMA verifies for the correct two- or four-digit format (i.e., 12-14, 1200, 1400). If **valid**, BCMA displays the order on the VDL every day using the Admin Time provided. If **invalid**, BCMA quits processing the order and sends a Due List Error Notification message.
- 3 BCMA verifies information provided in the Frequency of the Inpatient Medications order. (**Note:** The Frequency is the amount of time between medication administrations.)
 - If the Frequency is blank, contains a letter other than “O” (the letter), or lists a Frequency less than one minute, BCMA quits processing the order and sends a Due List Error Notification message. (**Note:** A blank indicates that no Frequency was specified.)
 - If the Frequency lists “O” (the letter), BCMA converts the Frequency to 1440 minutes (one day) and proceeds to Step #4.

Appendix A: Processing of Schedule Information

Steps for Processing Schedule Information (cont.)

- 4 BCMA verifies whether the order contains an Odd Schedule by determining that data in the order Frequency is not divisible by 1440 minutes (one day), and that 1440 minutes is not divisible by the data in the order Frequency. See the examples provided below.
- If the order contains an Odd Schedule and times in the Admin Time, BCMA quits processing the order and sends a Due List Error Notification message.
 - If the order contains an Odd Schedule, but no times in the Admin Time, BCMA displays the medication order on the VDL using the Frequency and order Start Date/Time provided by Inpatient Medications to calculate the Admin Times.
 - If the order does *not* contain an Odd Schedule and no times are listed in the Admin Time, BCMA displays the medication order on the VDL using the Frequency and order Start Date/Time provided by Inpatient Medications to calculate the Admin Times.
 - If the order does *not* contain an Odd Schedule, but times are listed in the Admin Time, BCMA verifies the Frequency listed in the order.
 - If the Frequency is *less than* 1440 minutes (or one day), BCMA displays the medication order on the VDL every day, based on the Admin Times provided in the order.
 - If the Frequency is *greater than* 1440 minutes (or one day), BCMA uses the Frequency information from Inpatient Medications to determine which day to display the medication order on the VDL, based on the Admin Time provided in the order.

Appendix A: Processing of Schedule Information

Steps for Processing Schedule Information (cont.)

This section provides examples showing Schedules Types that are processed as Odd Schedules and those that are not.

Note: For an Odd Schedule to occur, both statements for a Schedule Type must be False.

Examples of Odd Schedules

Schedule Type: Q5H (300 minutes)

- 300 minutes divided by 1440 minutes = fraction, not a whole number = False
- 1440 divided by 300 minutes = 4.8 (fraction, not a whole number) = False

Schedule Type: Q3XM (13440 minutes)

- 13440 minutes divided by 1440 minutes = 9.3 (fraction, not a whole number) = False
- 1440 divided by 13440 minutes = fraction, not a whole number = False

Examples of Schedules That Are Not Odd Schedules

Schedule Type: Q2H (120 minutes)

- 120 minutes divided by 1440 minutes = 8.3 (fraction, not a whole number) = False
- 1440 minutes divided by 120 = 12 (whole number) = True

Schedule Type: QOD (2880 minutes)

- 2880 minutes divided by 1440 minutes = 2 (whole number) = True
- 1440 minutes divided by 2880 = 0.5 (fraction, not a whole number) = False